Messy Overhead Networks

Overhead communication networks create visual clutter,
safety risks, and maintenance challenges.
Cities need cleaner, safer, and more reliable infrastructure.

Before

After

Why Go Underground?

Moving overhead networks underground isn't just about looks — it's about safety, reliability, and smarter deployment

Governments and municipalities are recognizing that underground fiber infrastructure:

Improves public safety
Enhances city aesthetics
Protects networks from weather and external damage
Creates long-term, future-ready infrastructure

Why Microduct?

Going underground doesn’t have to mean long construction times or major disruption.

Microduct combined with micro-trenching (mini-trenching) offers a smarter solution:

Minimal surface disruption, even in busy urban areas
Faster installation and lower restoration costs
Flexible capacity for future fiber expansion
Ideal for dense cities, curved routes, and narrow streets

Case Studies - South Korea

Proven in the Real World

Seoul, the bustling capital of South Korea, and Busan, one of the country's major metropolitan cities, have become testing grounds for micro-trenching — a technique that delivers significant benefits for urban fiber deployment.

Seoul, South Korea

Busan, South Korea

Background & Direction

While Korea leads the world in fiber adoption, the country is actively transitioning from overhead fiber installations to underground networks for safety and aesthetic reasons.

Seoul, the bustling capital of South Korea and one of the busiest cities globally, has become a testing ground for micro-trenching, a deployment method designed to minimize disruption while modernizing telecom infrastructure.

Project & Results

Despite heavy traffic and dense urban activity, Seoul has experienced minimal disruption during trial micro-trenching installations.

This pilot project is a collaborative effort involving the Ministry of Science and ICT, Gwanak-gu County Office, the Institute of Civil Engineering and Building Technology, and the Korea Telecommunications Operators Association.

KNET's microduct solutions played a critical role in the project's success, helping pave the way for expansion to additional cities and regions.